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FILING DATE APPLICATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/619,405 07/14/2003 Paul V. Cooper 23438.00040 7654 06/07/2006 EXAMINER 7590 SQUIRE, SANDERS & DEMPSEY L.L.P. KASTLER, SCOTT R Two Renaissance Square ART UNIT PAPER NUMBER Suite 2700 40 North Central Avenue 1742 Phoenix, AZ 85004-4440 DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	10/619,405	COOPER, PAUL V.
Office Action Summary	Examiner	Art Unit
	Scott Kastler	1742
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1)⊠ Responsive to communication(s) filed on 18 April 2006.		
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This action is non-final.		
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4)⊠ Claim(s) <u>1-54</u> is/are pending in the application.		
4a) Of the above claim(s) <u>40-54</u> is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-39</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
9) The specification is objected to by the Examiner.		
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		
a) ☐ All b) ☐ Some * c) ☐ None of:		
1. ☐ Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this National Stage		
application from the International Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of the certified copies not received.		
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview Summar	v (PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	Date
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) Notice of Informal 6) Other:	Patent Application (PTO-152)

Art Unit: 1742

#### Election/Restrictions

Applicant's election with traverse of claims 1-39, (Group I) in the reply filed on 4/18/2006 is acknowledged. The traversal is on the ground(s) that there is no serous burden on the Examiner. This is not found persuasive because as stated in the original restriction requirement, the inventions are independent and distinct and examination of the separate inventions of both Groups would impose a serous burden on the Examiner.

The requirement is still deemed proper and is therefore made FINAL.

## Information Disclosure Statement

The Examiner acknowledges receipt of the lengthy information disclosure statement filed 6/24/2005. There is no requirement that applicants explain the materiality of English language references, however the cloaking of a clearly relevant reference in a long list of references may not comply with applicants' duty to disclose, see Penn Yan Boats, Inc. v. Sea Lark Boats, Inc., 359 F. Supp. 948, aff'd 479 F. 2d. 1338. There is no duty for the Examiner to consider these references to a greater extent than those ordinarily looked at during a regular search by the Examiner. Accordingly, the Examiner has considered these references in the same manner as references encountered during a normal search of Office search files.

### Double Patenting

Applicant is advised that should claim 14 be found allowable, claims 15 and 16 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing,

Art Unit: 1742

despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). The above claim s differ only in the intended use of the claimed apparatus (use as a rotor shaft in various devices) and it has been well settled that the manner or method of use of an apparatus cannot be relied upon to fairly further limit claims to the apparatus itself. See MPEP 2114.

Applicant is advised that should claim 18 be found allowable, claim 19 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). The above claim s differ only in the intended use of the claimed apparatus (use as a gas-transfer conduit in various devices) and it has been well settled that the manner or method of use of an apparatus cannot be relied upon to fairly further limit claims to the apparatus itself. See MPEP 2114.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6-19 and 22-38 are rejected under 35 U.S.C. 102(a) as being anticipated by Grant et al '723. Grant et al teaches that it was known in the art at the time the invention was

Art Unit: 1742

made to protect graphite components subject to a molten aluminum environment by cementing a protective sleeve of silicon carbide of uniform thickness around the graphite component with the inclusion of a gasket (the shaft coupler) between the protective coating and the graphite component (see the claims for example) where these components may be posts, rotary shafts and molten metal conduits (risers for example) (see col. 3 lines 37-45 for example) which can be employed in scrap metal melters or rotary degassers as instantly claimed (see figure 9 for example) thereby showing all limiting aspects of the above claims since the method of making the claimed protected component cannot serve to distinguish claims to the protected component itself unless applicant can present a showing, in proper form, that the process of making the protected component provides a substantially different final component from the component shown by Grant et al'723. See MPEP 2113.

Claims 1 and 7-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Morando'753. Morando'753 teaches a protected graphite component (36) for use in molten metal pumps where the component is covered with a protective sheath (34) and with cement (44) betwee3n the sheath and component (36) showing all aspects of the above claims since the method of making the claimed protected component cannot serve to distinguish claims to the protected component itself unless applicant can present a showing, in proper form, that the process of making the protected component provides a substantially different final component from the component shown by Grant et al'723. See MPEP 2113.

Art Unit: 1742

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art of the instant disclosure in view of either of Grant et al'723 or Morando'753. the admitted prior art of the instant disclosure at paragraphs [0003]-[0015] for example, teaches devices and components of molten metal processing showing all aspects of the above claims except the use of a protected sheath of ceramic cemented around components of graphite subject to attack by the molten metal. As applied to claim 1 above, both of Grant et al'723 and Morando'753 teach that it was known in the art at the time the invention was made to provide a protective sheath of ceramic cemented around components which would be subject to attack by molten metal. Because any of the graphite components disclosed in the devices taught by the admitted prior art of the instant disclosure would also desire the improved resistance to attack by molten metal, motivation to protect any or all of the components of the devices described by the admitted prior art of the instant disclosure in the manner recited by either of Grant et al'723 or Morando'753 would have been a modification obvious to one of ordinary skill in the art at the time the invention was made.

Art Unit: 1742

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Kastler whose telephone number is (571) 272-1243. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Scott Kastler Primary Examiner Art Unit 1742